

Pay per Outcome in DBM

Short link: go/xbid-ppo

emaani@, carlburch@

Status: publicly launched Sep 2019

Draft last updated: 2018/02/10

Comment [1]: What's the latest on this project?

Please note this is also below the line for AdSpam in Q3.

+tmaurer@google.com
+guoyumin@google.com
+bjorke@google.com

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Mute-This-Ad

Testing and Verification

- Phase I
- Phase II
- Phase III

Child documents

- [Task tracker \(go/dbm-ppo-tracker\)](#)
- [Is it PPO? \(go/is-it-ppo\)](#)
- [PPO & costs \(go/xbid-ppo-fees\)](#)
- [PPO auction behavior \(go/xbid-ppo-auction\)](#)

Summary

DoubleClick Bid Manager (DBM) buys ad impressions based on declared targeting criteria on CPM basis. Advertisers also pay for those ad impressions on CPM basis. In addition, DBM charges a negotiated platform fee on top of the final CPM price. This fee is subject to volume discounts but it otherwise is the same no matter the amount of Google secret sauce used.

In contrast, **AdWords** allows advertisers to purchase ad inventory in an arbitrage mode, where buyers declare the objective of their campaign (engagement, click, conversion, active view, ...) and set a target price. Such advertisers only pay when their desired outcome (e.g., click) happens while GDN purchases ad impressions on CPM basis. The GDN approach also allows us (Google) to enable advanced optimization techniques that are otherwise impossible (by making margins dynamic). In this document, we discuss a detailed design to make outcome based buying possible on DBM. More information about the product can be found in [this PRD](#).

Product Overview

Possible Products

The likely first offering in this product will be a target CPA product, where advertisers specify a target CPA that they wish to attain, pay per click, and aim to maximize conversion volume. This is a successful product that GDN already offers, and we will leverage the existing technology for outcome-based buying. The table below shows possible product offerings:

	Optimization Goal	Bidding Knob	Pay per	Product
1	Conversion (CTC)	Target CPA	Click	PPO v1

Comment [2]: What kind of conversions can be targeted?

Note that we don't do much conversion spam cleaning either, especially for doubleclick.

Comment [3]: Floodlight conversions. Note that they will be an "optimization goal" independent of payment, which is already an option for Target CPA bidding in DBM when the advertiser pays for impressions. So if conversion spam in DBM is not as strong as conversion spam in GDN, it may impact our goal of performance parity, but is not as high a priority as addressing click spam.

Comment [4]: +dth@google.com
+zacharylf@google.com
+bjorke@google.com

FYI
Assigned to Dimitris Theodorakis

Comment [5]: +tmaurer@google.com should we potentially consider a pay per video outcome? For example complete in view audible? This will allow us to differentiate PPO from GDN and allow to pursue a PPO for 3P video inventory similar to TrueView.
Assigned to Toby Maurer

Comment [6]: Will the cost type field be populated
(https://cs.corp.google.com/piper///depot/google3/ads/base/ad-stats-
enums.proto?type=cs&sq=package:piper+file://
depot/google3+-
file:google3/experimental&rc=187266163 ... [1]

Comment [7]: +emaani@google.com
+tlipus@google.com

Comment [8]: I am not very familiar with this part of the code, but looks like this field is set using click/imp cost and
publisher_impression_payment_micros h ... [2]

Comment [9]: +deeptib@google.com At what level do advertisers set vtc weight? Will we just ignore the setting to work only with CTCs?

Comment [10]: At the line item level.

Comment [11]: so this should be OK, we will have to force a vtc weight of zero initially

Comment [12]: +ardianp@google.com
+asriraman@google.com
+manikandan@google.com ... [3]

Comment [13]: I know but VTC will not be possible given the CPC payment and other gdn like requirements

Comment [14]: +1 on VTC. DBM delivers higher volume of VTC than GDN. Any analysis on how much spend is addressable with CTC only? (e.g. how many customers and spe ... [4]

Comment [15]: we have a vtc solution in GDN as well. We can enable VTCs hopefully soon after. currently almost 90% of spend use VTC weight>0

2	View	fixedAVCPM	ActiveView	PPO v2
3	Conversion (CTC + VTC)	Target CPA	ActiveView	PPO v3
4	Conversion (CTC)	fixedCPA	Click	PPO v3
5	Impression Value	Target cost per value	ActiveView	??

Targeting Agencies

For agencies, the main objective should be to provide them controls, improve their performance, while migrating to an arbitrage world to move the conversation away from margins. Product offering #2 (i.e., AVCPM) and #5 (i.e., custom bidding) from above table are both good candidates for agencies.

Disallowed DBM features

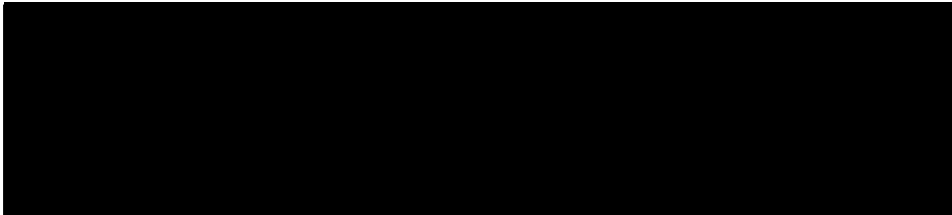
For reasons discussed elsewhere in this document, there are several DBM features that this document proposes disabling for PPO line items.

- 3PAS creatives (i.e., ...DFA_TRACKED creative types), native creatives, wrapped creatives
- Private deals (PA, PD, and PG)
- Impression-count budgets
- Non-invoiceable CPM fees and media fees (go/xbid-ppo-fees).
- The only revenue model supported is Total Media Cost.

Missing PPO Product Features

PPO, at least in its initial offering, will not support some DBM features that some existing DBM advertisers use. Among them:

1. Optimization towards view-through conversions
2. Favor spend or bid lowering (maximize clicks/conversions)
3. Any DDA or other attribution models that attributes to impressions
4. Maximum average CPM constraint
5. CPM revenue markup model



Formatted Table

Comment [16]: +cverhoofstad@google.com

do you agree with this?

Comment [17]: I would agree that those are good candidates for agencies, but not sure why they would be better than 1 for example? Happy. to get more specific input from advertisers/agencies when we socialize our plans with PPO!

Comment [18]: +emaani@google.com +carlburch@google.com +tmaurer@google.com do we allow 3P verification services? E.g. moat, IAS both from a measurement as potentially pre-bid blocking perspective? Assigned to Ehsan Maani_

Comment [19]: Yes, 3P brand safety targeting is allowed.

... [5]

Comment [20]: An interesting corner case here BTW is 3P viewability targeting. It's a weird story where we forbid ActiveView targetin

... [6]

Comment [21]: Is template 509 (partial slot template) for DBM also going to be allowed?

... [7]

Comment [22]: +carlburch@google.com

Comment [23]: Curious to know why for this?

(This is good to exclude as from a spam

... [8]

Comment [24]: Right, the reasoning here is partially because it makes spam more challenging. But also because we're afraid

... [9]

Comment [25]: +cverhoofstad@google.com

does this impact the addressable market?

... [10]

Comment [26]: I believe it will definitely impact the addressable market. to my knowledge, it would be the first feature/f

... [11]

Comment [27]: BTW, this might not be a GA blocker. ... So depending on ENG resources required to make this work we should eit

... [12]

Comment [28]: If we want the 3P ad serving case, and if we are planning to charge by clicks, then we need to be able to ask those 3P

... [13]

Comment [29]: How much does this limit us in terms of addressable market?

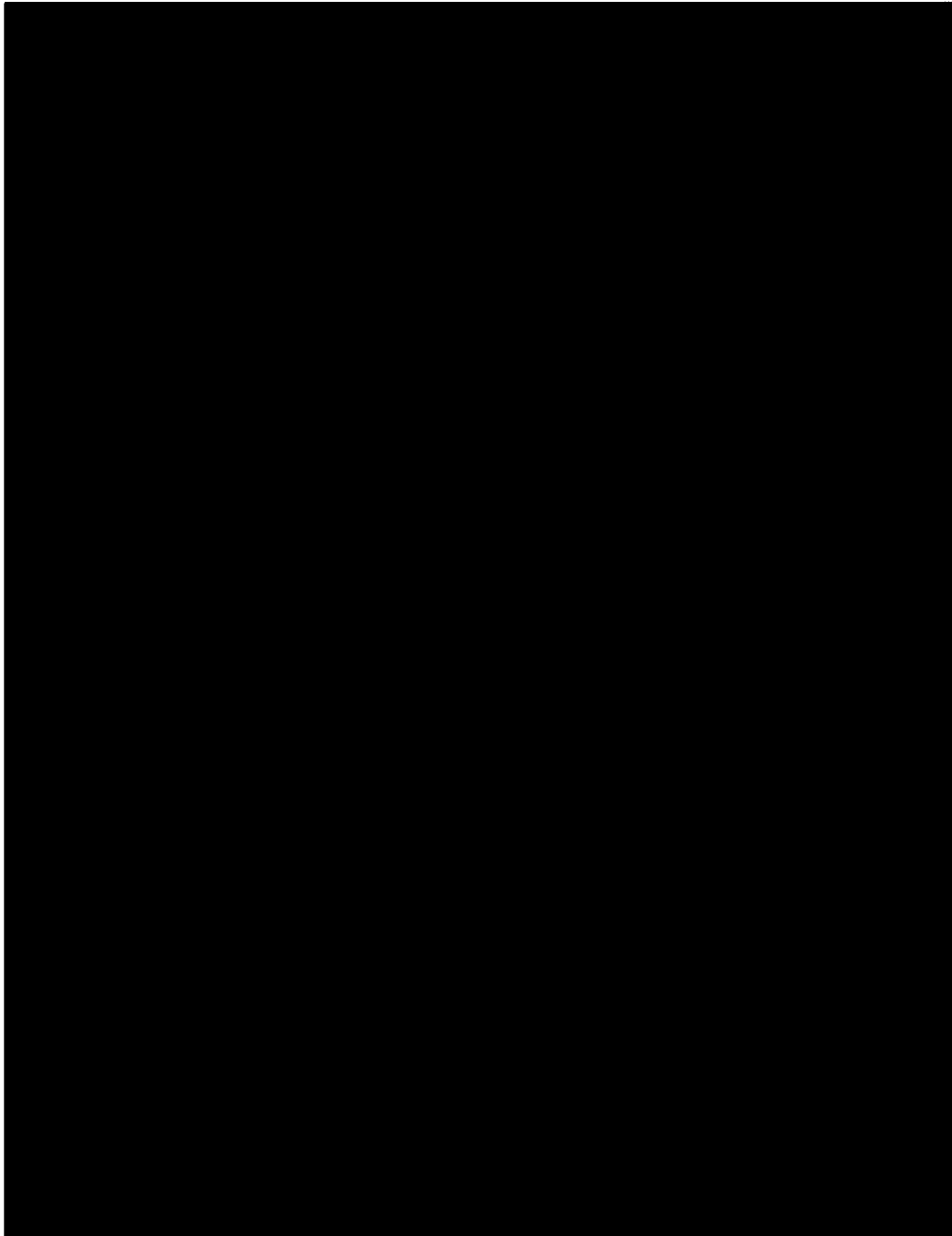
Comment [30]: +emaani@google.com +carlburch@google.com does this mean we are able to support Private Auctions? Would

... [14]

Comment [31]:

Comment [32]: +tmaurer@google.com +gdeng@google.com

Comment [33]:



Redacted - Privilege

Comment [35]: +tmaurer@google.com
+carlburch@google.com [REDACTED]

Comment [36]: +carlburch@google.com
+tmaurer@google.com
+gviswana@google.com [REDACTED]

Comment [37]: [REDACTED]

[REDACTED]

[REDACTED]

Comment [38]: [REDACTED]

Comment [39]: +yinglin@google.com [REDACTED]
[REDACTED] [18]

Comment [40]: +manikandan@google.com
Reassigned to Manikandan Subramanian

Comment [41]: [REDACTED]

Comment [42]: [REDACTED]

Comment [43]: [REDACTED]

Comment [44]: [REDACTED]

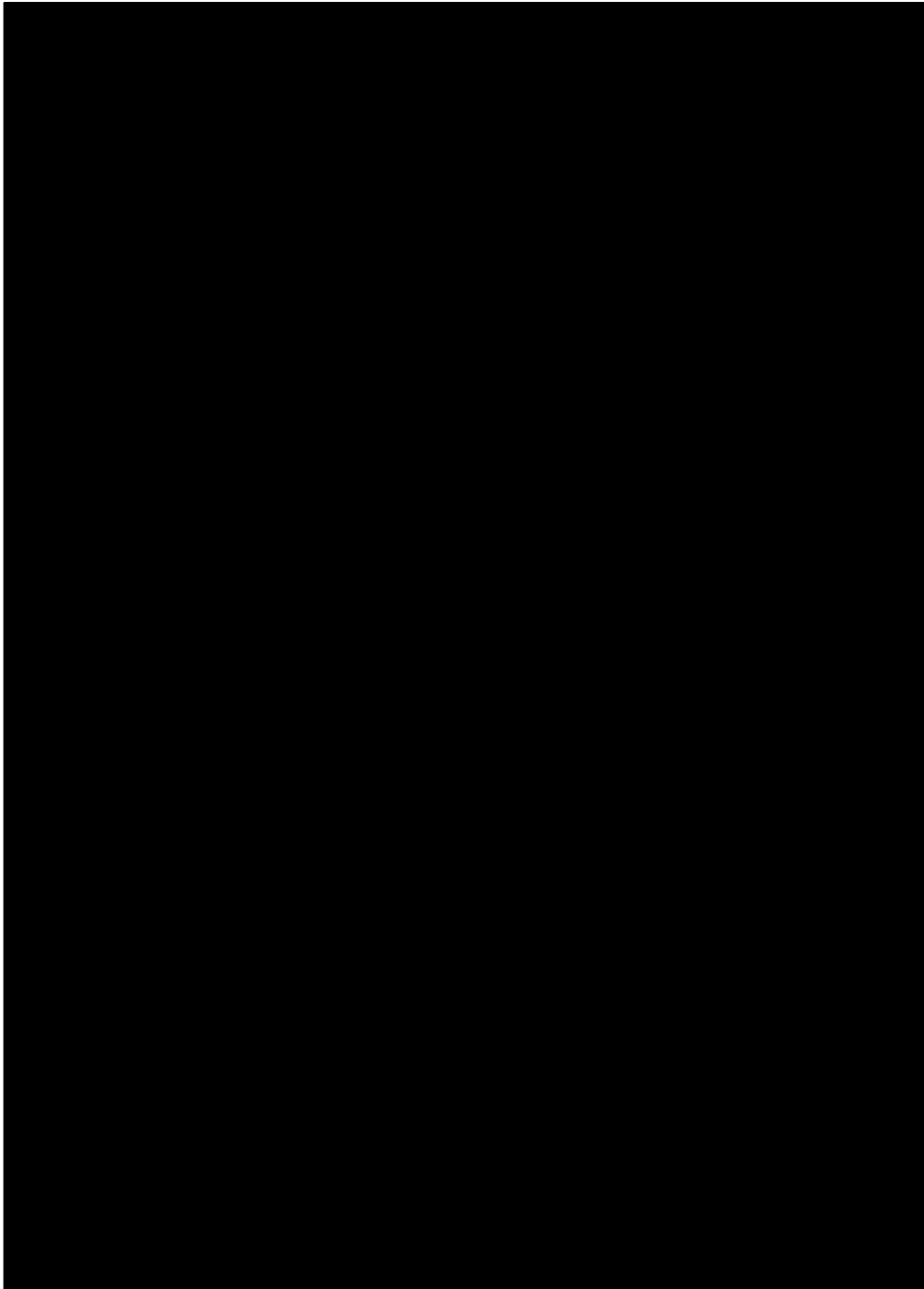
Comment [45]: [REDACTED]
+emaani@google.com

Comment [46]: [REDACTED]

Comment [47]: [REDACTED]

Comment [48]: [REDACTED]

Comment [49]: [REDACTED]



Comment [50]: [REDACTED]

Comment [51]: +wanghui@google.com
+rbaz@google.com
+diamondstone@google.com

FYI

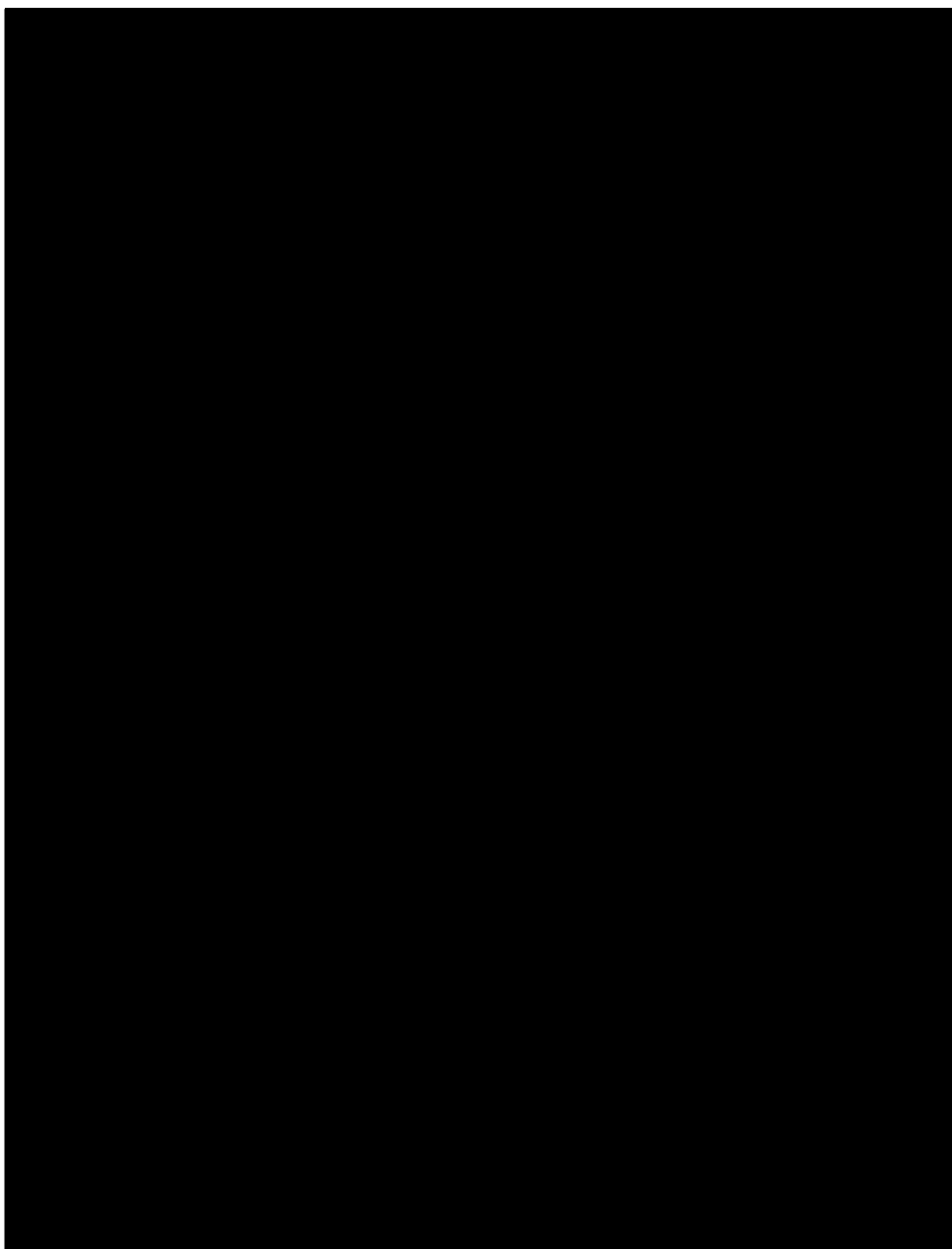
Comment [52]: [REDACTED]

+dth@google.com
+diamondstone@google.com

Comment [53]: +davidmay@google.com
+emaani@google.com +carlburch@google.com

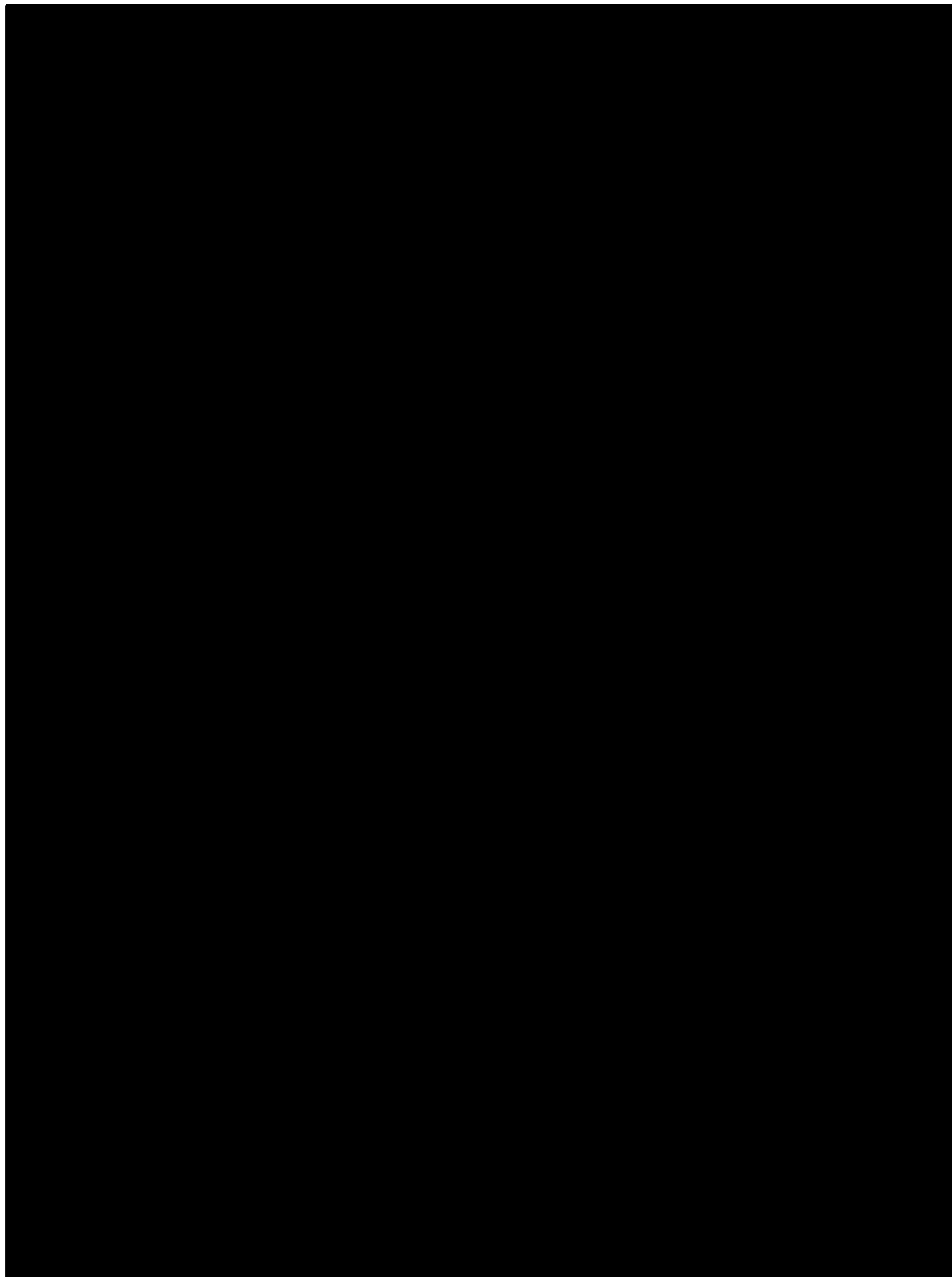
Comment [54]: +mrvladimir@google.com
since the first consideration is relevant

[REDACTED]

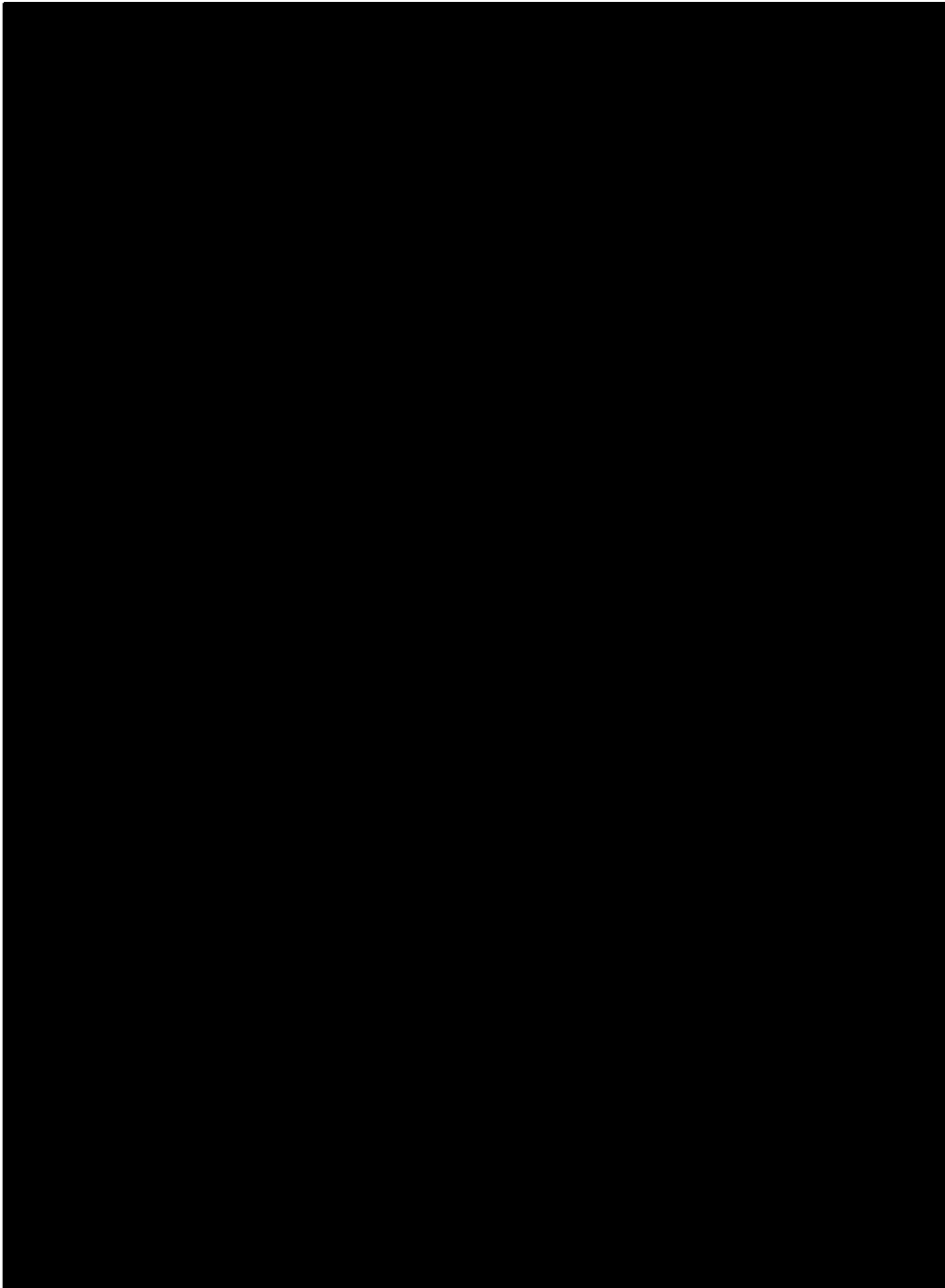


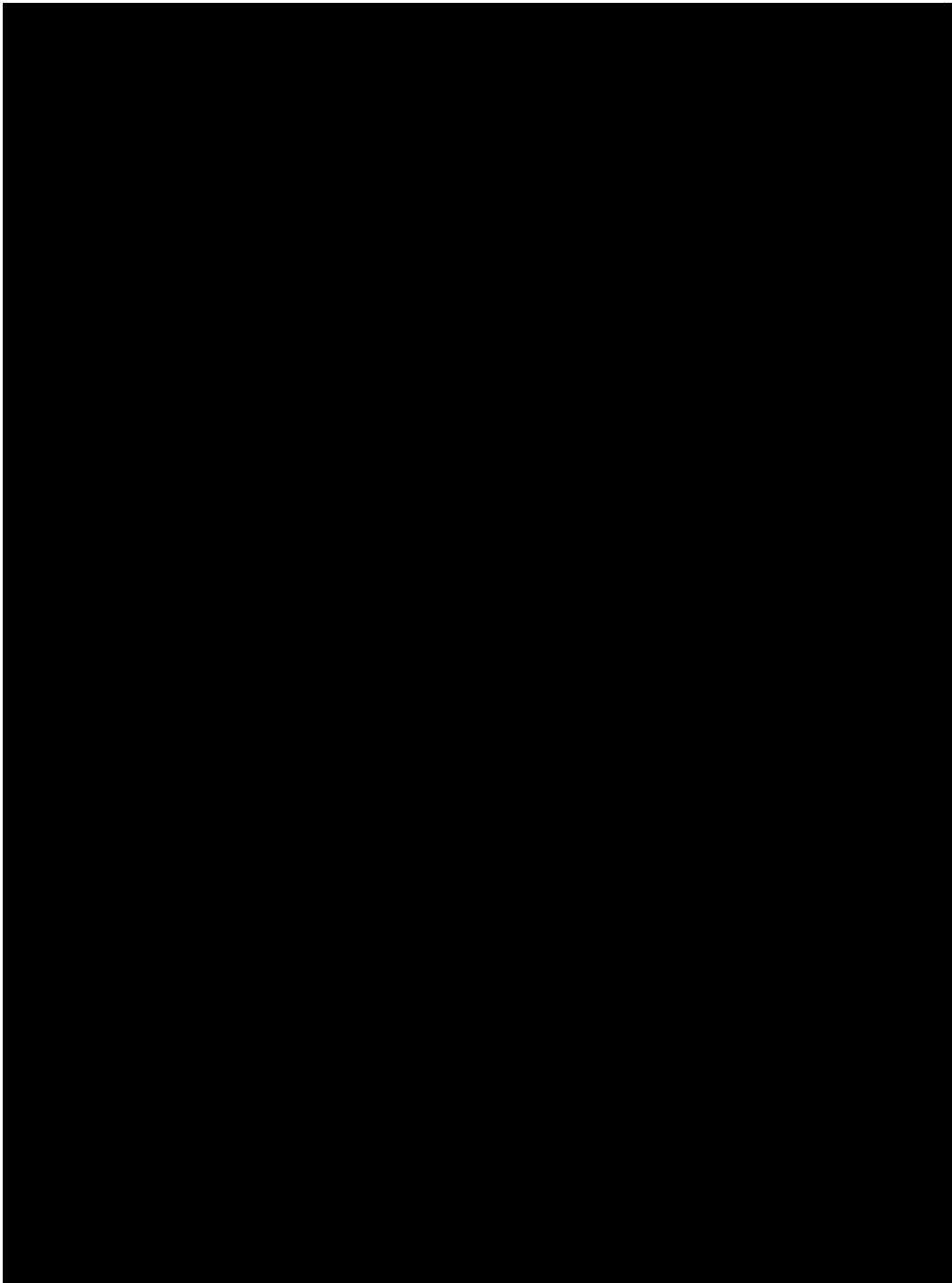
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[Redacted]

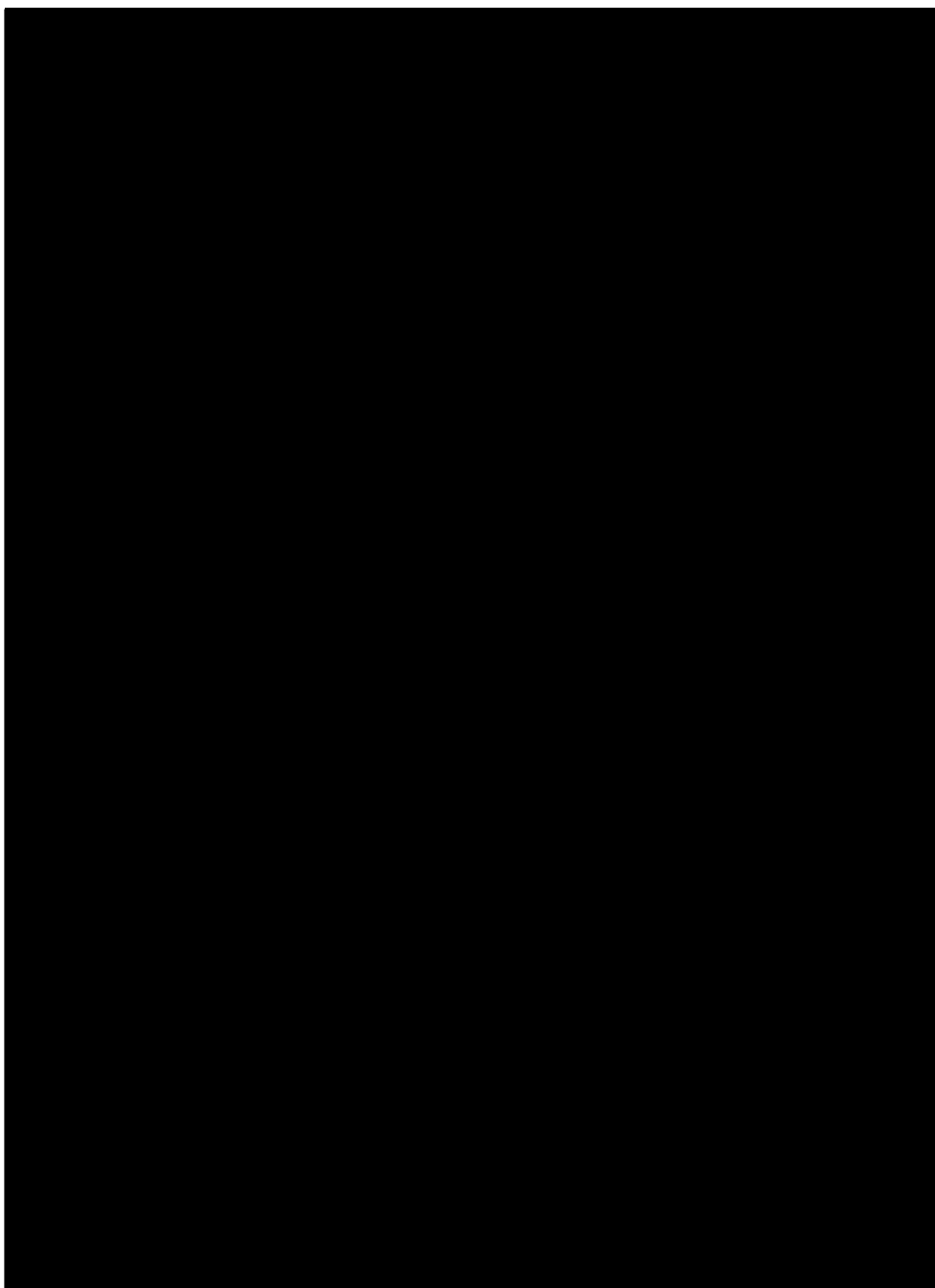
Comment [56]: +jaywu@google.com



- Comment [57]:**
[REDACTED]
- Comment [58]:**
[REDACTED]
- Comment [59]:**
[REDACTED]
- Comment [60]:** +ywhuang@google.com
[REDACTED]
- Comment [61]:**
[REDACTED]
- Comment [62]:**
[REDACTED]
- Comment [63]:**
[REDACTED]
- Comment [64]:**
[REDACTED]
- Comment [65]:**
[REDACTED]









Comment [66]: +emaani@google.com
+carlburch@google.com I added some details here...

Comment [67]: Details of AdSpam issues and requests for DBM team to achieve AdWords parity at <https://docs.google.com/document/d/10a2VLcjIEwtccxSj-uth2UhKeBsGbQ5iLNTiKhIAPk>

Comment [68]: Click signals attached to DBM clicks will be a blocker if you want AdWords click spam.

Comment [69]: +dth@google.com

Comment [70]: +davidmay@google.com
+emaani@google.com

[Redacted]

+nirmaljayaram@google.com

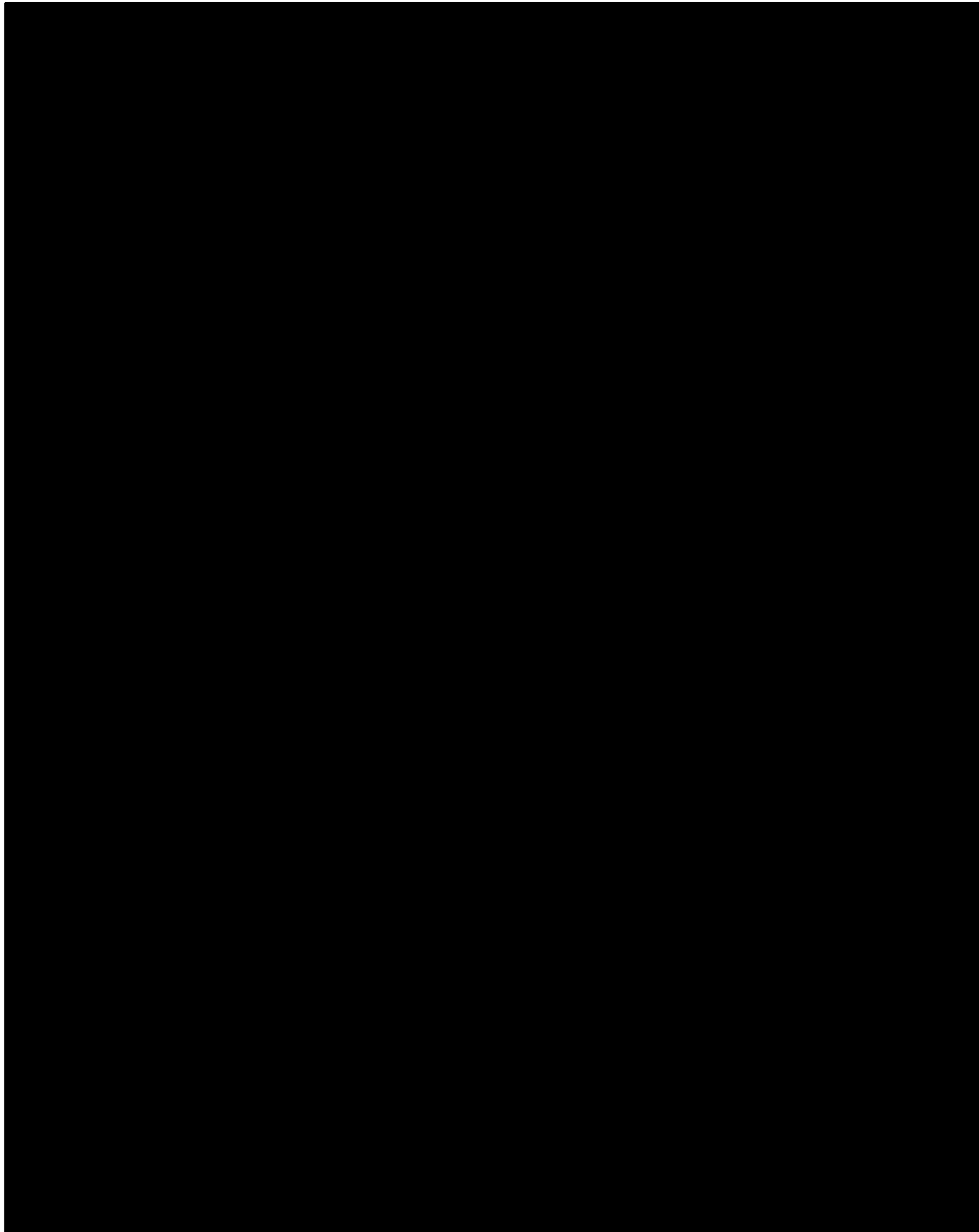
Comment [71]:

[Redacted]

[Redacted]

Comment [72]:

[Redacted]



Comment [73]: [REDACTED]

Comment [74]: [REDACTED]

Comment [75]: [REDACTED]

Comment [76]: +shilpaarora@google.com do you know the answer to this?

Comment [77]: +johanmk@google.com +albertchen@google.com can u comment on [REDACTED] it was done while I was on leave.

Comment [78]: [REDACTED]

Comment [79]: [REDACTED]

Phase III

Page 2: [1] Comment [6] David Turner 3/1/2018 1:59:00 AM

[REDACTED]

Page 2: [2] Comment [8] Ehsan Maani 3/3/2018 7:58:00 AM

[REDACTED]

Page 2: [3] Comment [12] Ying Lin 2/27/2018 10:18:00 PM

+ardianp@google.com
+asriraman@google.com
+manikandan@google.com

[REDACTED]

Page 2: [4] Comment [14] Vlad Dumitriu 3/6/2018 6:12:00 AM

[REDACTED]

Page 3: [5] Comment [19] Carl Burch 6/14/2018 7:26:00 PM

[REDACTED]

Page 3: [6] Comment [20] Carl Burch 6/14/2018 7:29:00 PM

[REDACTED]

Page 3: [7] Comment [21] David Turner 3/23/2018 6:16:00 PM

[REDACTED]

Page 3: [8] Comment [23] David Turner 3/20/2018 11:56:00 PM

[REDACTED]

Page 3: [9] Comment [24] Carl Burch 3/21/2018 4:50:00 PM

[REDACTED]

Page 3: [10] Comment [25] Toby Maurer 4/18/2018 8:05:00 PM

+cverhoofstad@google.com

does this impact the addressable market in a meaningful way?

Page 3: [11] Comment [26] Casper Verhoofstad 4/20/2018 8:42:00 PM

[REDACTED]

Page 3: [12] Comment [27] Casper Verhoofstad 4/27/2018 7:02:00 PM

[REDACTED]

Page 3: [13] Comment [28] David Turner 4/27/2018 7:14:00 PM

[REDACTED]

+bjorke@google.com

Page 3: [14] Comment [30] Casper Verhoofstad 4/27/2018 7:08:00 PM

+emaani@google.com +carlburch@google.com

[REDACTED]

Page 3: [15] Comment [33] Zack Phillips 4/25/2018 9:33:00 PM

[REDACTED]

Page 4: [16] Comment [37] Carl Burch 3/30/2018 12:27:00 AM

[REDACTED]

[REDACTED]

Page 4: [17] Comment [38]

Griffin Deng

3/30/2018 6:22:00 AM

[REDACTED]

Page 4: [18] Comment [39]

Ardian Poernomo

2/27/2018 1:14:00 AM

+yinglin@google.com

[REDACTED]

Page 4: [19] Comment [43]

David Maymudes

2/27/2018 10:49:00 PM

[REDACTED]

Page 4: [20] Comment [48]

David Maymudes

2/27/2018 10:51:00 PM

[REDACTED]

Page 4: [21] Comment [49]

Ehsan Maani

2/28/2018 12:19:00 AM

[REDACTED]

Page 7: [22] Comment [61]

Carl Burch

3/1/2018 2:30:00 PM

[REDACTED]

Page 7: [23] Comment [63]

Yu Meng

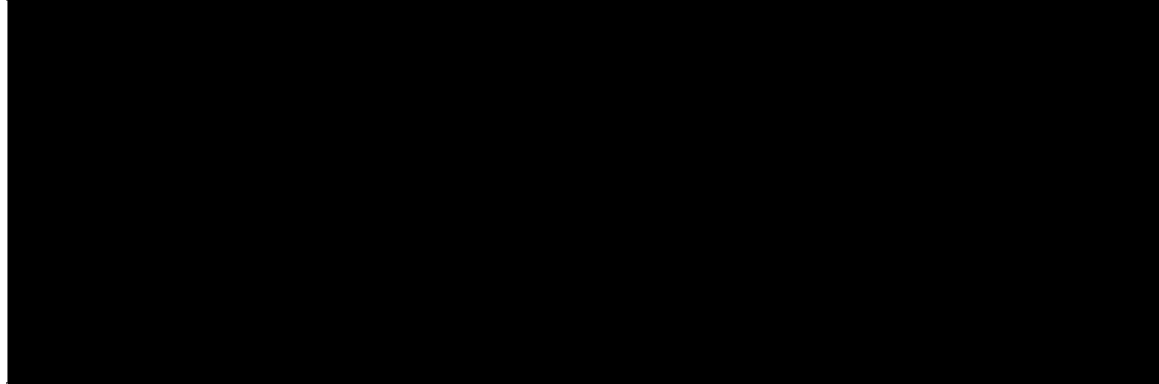
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Page 7: [24] Comment [64]

Carl Burch

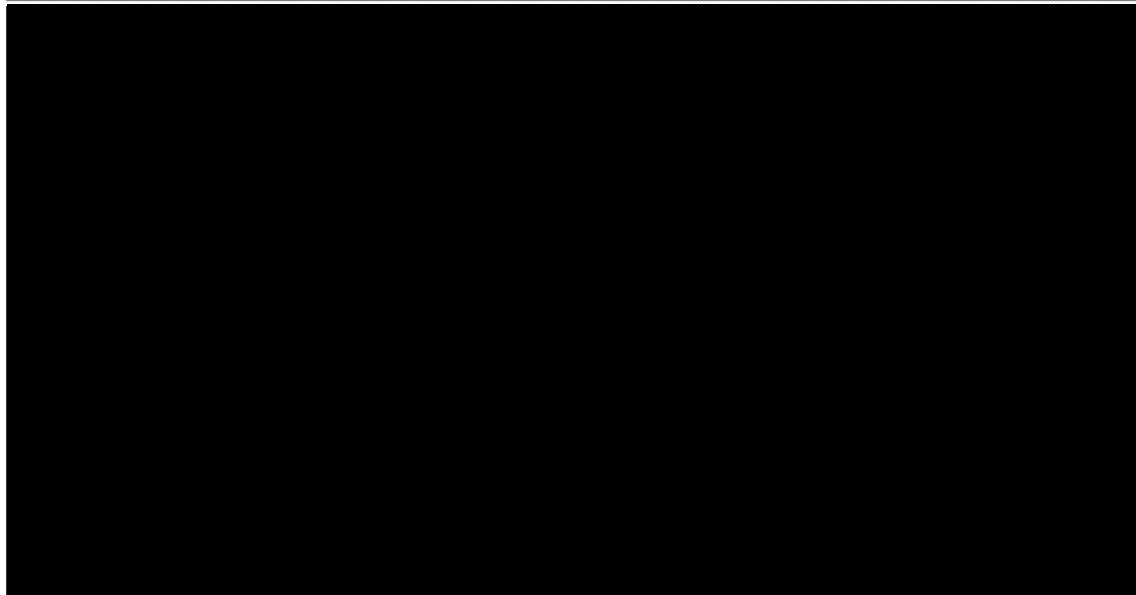
3/6/2018 5:22:00 PM



Page 11: [25] Comment [71]

David Turner

3/5/2018 12:20:00 AM



+dth@google.com
+zacharylf@google.com

Page 11: [26] Comment [72]

Zachary Loebel-Fried

3/6/2018 5:43:00 PM

